

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-022153**Date Inspected:** 24-Mar-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site

CWI Name:	Fred Von Hoff		
Inspected CWI report:	Yes	No	N/A
Electrode to specification:	Yes	No	N/A
Qualified Welders:	Yes	No	N/A
Approved Drawings:	Yes	No	N/A

CWI Present:	Yes	No	
Rod Oven in Use:	Yes	No	N/A
Weld Procedures Followed:	Yes	No	N/A
Verified Joint Fit-up:	Yes	No	N/A
Approved WPS:	Yes	No	N/A
Delayed / Cancelled:	Yes	No	N/A

Bridge No: 34-0006**Component:** Tower Grillage**Summary of Items Observed:**

This Quality Assurance (QA) Inspector, Craig Hager was on site at the job site between the times noted above. This QA Inspector was on site to randomly observe Quality Control (QC) personnel perform Non-Destructive Testing (NDT) and monitor American Bridge/Fluor (ABF) welding operations. This Quality Assurance (QA) Inspector, Craig Hager was on site between the times noted above.

East Tower leg:

Production welding is completed, QC inspections are completed and accepted, QA verification inspections completed.

South Tower leg:

Repair welding was completed by the end of the shift yesterday (1530, 3/22/11), final QC inspections on weld joint TG-S-P7-P8 is pending the 48 hour waiting period (1530, 3/24/11).

West Tower leg:

Repair welding was completed at approximately 1300 hours yesterday (3/23/11), final QC inspections on weld joint TG-W-P2-P3 is pending the 48 hour waiting period (1300, 3/25/11).

North Tower leg:

WELDING INSPECTION REPORT

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QC Inspector Fred Von Hoff informed this QA Inspector he had completed and accepted the visual and Magnetic Particle Testing on the Complete Joint Penetration (CJP) and Partial Joint Penetration PJP welds. QC Inspector Fred Von Hoff stated he was aware the 48 hour hold time on the final inspection for the fillet welds would not be up until approximately 1300 hours, 3/26/11. This QA Inspector performed a visual and MT verification on the CJP and PJP welds. The work observed appeared to comply with the contract requirements. Later this date, QC Inspector Mike Johnson started Ultrasonic Testing on the CJP welds. This QA Inspector started the UT verification on the welds behind QC Inspector Mike Johnson. QC Inspector Mike Johnson informed this QA Inspector he had inspected and found a defect in CJP weld joint TG-N-P5-P7. By the end of the shift this date this QA Inspector had completed the UT verification on all CJP weld joints except for TG-N-P1-P2 and TG-N-P2-P3. See Ultrasonic Testing report (TL-6027) and Magnetic Particle Testing report (TL-6028) this date for further details.

This QA Inspector randomly observed ABF welding personnel Gil Peralta (#9453) fitting and performing SMAW to seal weld the last cover plate at the rat hole the North Tower leg, skin E adjacent to skin D.

North and South Suspender Brackets:

Production welding is completed, QC inspections are completed and accepted, QA verification inspections completed.

This QA Inspector was informed by QC Inspector Fred Von Hoff the welding parameters for the personnel noted above were within the required heat input range in the Welding Procedure Specifications (WPS) ABF-WPS-D15-1162-4 for the PJP welds, ABF-WPS-D15-1042A-4 for CJP welds and ABF-WPS-D15-F1206 for Fillet welds. Note the welding parameters are the same for all three procedures. This QA Inspector randomly observed the amperages and voltages of ABF welding personnel noted above and they appeared to be within the ranges in the WPS. This QA Inspector observed that both 3.2 mm and 4.0 mm diameter E9018H4R electrodes were being used and stored in separate heated storage containers. This QA Inspector also observed the 1-hour exposure limit for the electrodes appeared to be monitored and adhered to.

Summary of Conversations:

This QA Inspector had general conversations with American Bridge/Fluor (ABF) and Caltrans personnel during this shift. Except as described above there were no notable conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy (510) 385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Hager,Craig	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer
